Remarks

In the present response, four claims (21-24) are canceled. Claims 1-20 are presented for examination.

Drawings Objections

The Office Action objects to the drawings because they allegedly do not include descriptive text for reference numbers 104, 106, 108, 110, and 112 in Figure 1. Applicants respectfully traverse.

Figure 1 shows seven different reference numerals (100, 102, 104, 106, 108, 110, and 112). Each of these reference numerals is identified and discussed in the detailed description with respect to Figure 1. Portions of the detailed description are reproduced below showing a discussion of each of the seven reference numerals (see p. 6, line 31 – p. 7, line 17: bold added):

A communications system **100**, as shown in FIG. 1, includes a sender node **102** (e.g., a computer, I/O device or a network interface that connects a computer or I/O device to a network) that communicates with one or more receiver nodes **104**, **106** via a communications network **108**. The sender node 102 includes one or more implementations or instances of a congestion control system **110**. Each congestion control system **110** facilitates transmission of a stream of data (or flow) from the sender node **102** to a single receiver node **104**, as shown in FIG. 2. The congestion control system **110** works with an underlying reliable transport protocol that uses ACK packets to acknowledge successful delivery of data packets to the destination.

The congestion control system **110** shown in FIG. 2 receives data from an application **112** executed on the sender node **102**, or on a separate node communicating with the sender node **102**, and transmits data as packets to a receiver node **104**.

Since the detailed description includes discussion of each reference numeral in Figure 1, Applicants respectfully request the Examiner to withdraw this objection.

Claim Rejections: 35 USC § 101

Claims 21-24 are rejected under 35 USC § 101 as being directed to non-statutory subject matter. This rejection is moot since claims 21-24 are canceled.

Claim Rejections: 35 USC § 112

Claims 21-24 are rejected under 35 USC § 112, first paragraph, as failing to comply with the written description requirement. This rejection is moot since claims 21-24 are canceled.

Claim Rejections: 35 USC § 102(e)

Claims 1-24 are rejected under 35 USC § 102(e) as being anticipated by USPN 7,136,353 (Ha). These rejections are traversed.

The claims recite various recitations that are not taught in Ha. Some examples are provided below with respect to the independent claims.

As one example, claim 1 recites receiving congestion feedback data relating to a network and then adjusting both a window limit and a rate limit based on the congestion feedback data. Ha does not teach this element.

Ha teaches TCP architecture having a congestion control mechanism. The congestion control mechanism "increases the size of the congestion window for a particular connection, this increase causes the flow control mechanism to immediately transmit additional data packets over that connection" (see Ha at column 6, lines 54-59). Thus, Ha teaches only adjusting the window limit, not adjusting both the window limit and rate limit. Ha does not even discuss rate limit.

Further, claim 1 recites that the window limit controls a number of packets in transit between source and destination nodes and the rate limit controls a rate at which the source node injects packets into the communications network. Ha never discusses a rate limit. Again, Ha only discusses changing the window limit.

As another example, claim 1 recites injecting data packets into the network according to the window limit and the rate limit. Ha never discusses a rate limit. Again, Ha only discusses changing the window limit.

Anticipation under section 102 can be found only if a single reference shows exactly what is claimed (see *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985)). For at least these reasons, independent claim 1 and its dependent claims are not anticipated by Ha.

Claim 13 recites a congestion control module that limits injection of packets into a network according to both a window limit and a rate limit. Ha does not teach this element.

Ha teaches TCP architecture having a congestion control mechanism. The congestion control mechanism "increases the size of the congestion window for a particular connection, this increase causes the flow control mechanism to immediately transmit additional data packets over that connection" (see Ha at column 6, lines 54-59). Thus, Ha teaches only adjusting the window limit, not adjusting both the window limit and rate limit. Ha does not even discuss rate limit.

Further, claim 13 recites that the window limit controls a number of packets in transit between source and destination nodes and the rate limit controls a rate at which the source node injects packets into the communications network. Ha never discusses a rate limit. Again, Ha only discusses changing the window limit.

For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference (see *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990)). For at least these reasons, independent claim 13 and its dependent claims are not anticipated by Ha.

Claim 17 recites receiving congestion feedback data and injecting data packets into the network according to both a window limit and a rate limit. Ha does not teach this element.

Ha teaches TCP architecture having a congestion control mechanism. The congestion control mechanism "increases the size of the congestion window for a particular connection, this increase causes the flow control mechanism to immediately

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transmit additional data packets over that connection" (see Ha at column 6, lines 54-59). Thus, Ha teaches only adjusting the window limit. Ha does not even discuss rate limit.

Further, claim 17 recites determining which of a window limit and rate limit are causing congestion in the network. Ha never discusses a rate limit. Again, Ha only discusses changing the window limit.

Anticipation is established only when a single prior art reference discloses each and every element of a claimed invention united in the same way (see *RCA Corp. v. Applied Digital Data Systems, Inc.*, 730 F.2d 1440, 1444 (Fed. Cir. 1984)). For at least these reasons, independent claim 17 and its dependent claims are not anticipated by Ha.

CONCLUSION

In view of the above, Applicants believe that all pending claims are in condition for allowance. Allowance of these claims is respectfully requested.

Any inquiry regarding this Amendment and Response should be directed to Philip S. Lyren at Telephone No. 832-236-5529. In addition, all correspondence should continue to be directed to the following address:

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